

Abstract:

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Title of Thesis: HPLC Analysis of Anthelmintics Using Core-shell Columns

This diploma thesis deals with HPLC analysis of three anthelmintics included into AAD group (i. e. amino-acetonitrile derivatives). Suitable separation conditions were studied using three core-shell columns (i. e. Ascentis Express RP – Amide, Ascentis Express F5 and Kinetex PFP). Finally, an efficiency of two preextraction methods (SPE, LLE) was tested.

The obtained results show the Ascentis Express RP-Amide column to be the suitable choice for the required purpose. The proposed mobile phases are MS compatible. SPE column STRATA X, exhibiting very high recoveries, is the best choice for SPE. The LLE recovery ratio can be taken as satisfactory.